

**REMARKS**

***Status of the Claims***

Claims 38-47 and 49-52 are pending, with Claims 38, 40, 42, 44, and 45 being independent. Claims 38, 44, and 45 have been amended to include the subject matter of canceled Claims 53-55. No new matter has been added.

Initially, Applicant would like to thank the Examiner for indicating that Claims 40-43 are allowed.

Applicant respectfully requests the Examiner to reconsider and withdraw the outstanding rejections in view of the foregoing amendments and following remarks.

***Claim Rejections Under 35 U.S.C. § 103(a)***

Claims 38, 39, 44-47, and 49-55 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,200,352 ("Pfiester") in view of U.S. Patent No. 5,880,508 ("Wu") in further view of alleged admitted prior art ("alleged APA") or U.S. Patent No. 4,947,081 ("Ohiwa") in further view of U.S. Patent No. 5,292,673 ("Shinriki").<sup>1</sup> This rejection is respectfully traversed.

Amended independent Claims 38, 44, and 45 each recite a method for fabricating a MOS device having a gate width of less than 0.3 micron comprising a combination of features that includes forming second spacers *on an upper surface* of the interfacial layer

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<sup>1</sup> In the previous Official Action dated September 30, 2005, Claims 38, 39, 44-47, and 49-52 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Pfiester in view of Wu in further view of alleged APA or Ohiwa. In a response filed November 14, 2005, Applicant amended Claims 38, 44, and 45 and

adjacent to the spacers formed in step (e) and to the high dielectric constant layer by depositing a film selected from the group consisting of phosphosilicate glass, oxides, and nitrides over the entire surface of the device and then anisotropic etching the film.

The Official Action acknowledges that Pfiester, Wu, APA and Ohiwa fail to disclose, in part, “forming second spacers on the interfacial layer adjacent to the spacers formed in step (e) and to the high dielectric constant layer by depositing a film selected from the group consisting of phosphosilicate glass, oxides, and nitrides over the entire surface of the device and then anisotropic etching the film.” (Page 5 of the Official Action).

Accordingly, Shinriki is cited as disclosing “forming a spacer (12, fig. 7b) adjacent to the gate electrode on an upper surface of the high dielectric layer by deposition and a second spacer (17, fig. 7b; wherein on means touching) on the interfacial layer adjacent to the spacers formed in step (e) by deposition.” (Page 5 of Official Action).

Specifically, Shinriki discloses forming an insulating film 12 on the side of a gate electrode 4, removing exposed portions of a laminated film comprising a tantalum oxide film 2 and a silicon dioxide film 3 by etching simultaneously, and subsequently forming a second insulating film 17 on the side of the gate electrode by depositing a PSG film and applying anisotropic etching to the entire surface. (Column 5, Lines 31-63). Thus, the second insulating film 17 of Shinriki is formed on an n-type diffusion layer 16 or source and drain regions 20, rather than *on an upper surface* of the silicon dioxide film 3. (Figures 7a-7c and Column 5, Line 58 – Column 6, Line 2). In particular, as noted above, the Official Action

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added Claims 53-55.

asserts that Shinriki discloses “a second spacer . . . *touching* . . . the interfacial layer.”

(Emphasis added).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MPEP § 2143.

Applicant respectfully submits that the combination of Pfeister, Wu, non-analogous Ohiwa, and alleged APA with Shinriki does not disclose or suggest all the claim limitations of amended independent Claims 38, 44, and 45, as Pfeister, Wu, non-analogous Ohiwa, and alleged APA with Shinriki does not disclose or suggest forming second spacers *on an upper surface* of the interfacial layer adjacent to the spacers formed in step (e) and to the high dielectric constant layer by depositing a film selected from the group consisting of phosphosilicate glass, oxides, and nitrides over the entire surface of the device and then anisotropic etching the film, as recited in amended independent Claims 38, 44, and 45.

Accordingly, for at least the above-noted reasons, Applicant respectfully submits that the Official Action has not set forth a *prima facie* case of obviousness. Accordingly, withdrawal of the rejection is respectfully requested.

***Conclusion***

For the reasons noted above, the art of record does not disclose or suggest the inventive concept of the presently claimed invention as defined by the claims.

In view of the foregoing amendments and remarks, reconsideration of the claims and allowance of the subject application is earnestly solicited. The Examiner is invited to contact the undersigned at the below-listed telephone number, if it is believed that prosecution of this application may be assisted thereby.

Respectfully submitted,

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Date: April 17, 2006

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